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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/765,073

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Angel Cercos

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INTELLECTUAL PROPERTY ADMINISTRATION
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EXAMINER

EVANISKO, LESLIE J

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,073

Applicant(s)

CERCOS ET AL.

Examiner

Leslie J. Evanisko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/03/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>partial English translation of JP 5-38853</u> |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference numeral 200 in Figure 9 and reference numeral 129 in Figure 5. To correct the problem regarding reference numeral 200, it is suggested that on page 11, line 25, the term "190" be deleted and replaced with --200-- since that is how the print media drive arrangement appears to be designated in Figure 9. To correct the problem regarding reference numeral 129, it is suggested that on page 8, line 15, the term "detector 29" be deleted and replaced with --detector 129-- to provide the appropriate description of reference numeral 129 shown in Figure 5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 2-4, 6, 11, 12, and 14 are objected to because of the following informalities:

With respect to claim 2, it is suggested that the term "the speed" in line 1 be deleted and replaced with --a speed-- since no speed was previously recited.

With respect to claim 3, it is suggested that the term "the amount" bridging lines 1-2 be deleted and replaced with --an amount-- since no amount of rotation was previously recited.

With respect to claim 4, it is suggested that the term "the tractional force" bridging lines 1-2 be deleted and replaced with --a tractional force-- since no tractional force was previously recited.

With respect to claims 6 and 14, it is suggested that the term "it" in each claim be deleted and replaced with the actual structure to which "it" is referring to insure the claim language is clear and concise.

Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6 and 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakakibara et al. (US 6,851,802 B2). Sakakibara et al. teach a method and an arrangement for driving a print media through a hardcopy apparatus comprising a first roller member 101 for feeding the print media to a print zone, a second roller member 103 for removing the print media from the print zone, a drive device 110 arranged to drive the first roller member with first drive parameters (i.e., speed/tractional force) and arranged to drive the second roller member with second drive parameters (i.e., speed/tractional force) as the print media passes through the print zone, where the drive device is arranged to drive at least one of the roller members with different drive parameters (i.e., different speed/tractional force) as an edge of the print media passes through the print zone. See Figures 9-12 and column 9, line 47 through column 10, line 67 in particular.

With respect to claims 2-4, note Sakakibara et al. teach changing the rotation speed of the discharge roller 103, as described in column 10, lines 25-53 in particular. Note that changing the speed of the discharge

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roller also inherently affects other drive parameters such as amount of rotation of the roller and tractional force. For example, attention is invited to the discussion of the relationship between tractional force (i.e. pressure between roller nip) and slip in feeding sheet in column 10, lines 35-47 of Sakakibara et al.

With respect to claims 5, 16, and 19, note Sakakibara et al. teach changing the drive parameters (i.e., speed of the discharge roller) “gradually” (at least to some extent) in column 11, lines 13-38 and in Figure 12.

With respect to claim 6, note Sakakibara et al. teach a detector 106 for detecting the trailing edge of the print media and causing the drive device to change at least the second drive parameters in column 10, lines 18-53.

With respect to claim 15, Sakakibara et al. teach an arrangement for driving a print media through a hardcopy apparatus including all of the structure as recited, wherein the drive device drives the first and second roller members at a predetermined transmission ration as the print media passes through the print zone and the transmission ration is varied as an edge of the print media passes through the print zone. Note the above comments with respect to claim 1.

With respect to claim 17, note Sakakibara et al. teach a hardcopy device including a printhead and means for moving the print media past

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the printhead as recited. Again, note the above comments with respect to claim 1.

7. Claims 1-6 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Osumi et al. (JP 05-38853). Osumi et al. teach an arrangement for driving a print media 2 through a hardcopy apparatus comprising a first roller member 4a1 for feeding the print media to a print zone, a second roller member 4b1 for removing the print media from the print zone, a drive device 4d1, 4d2 arranged to drive the first roller member with first drive parameters (i.e., speed) and arranged to drive the second roller member with second drive parameters (i.e., a slightly higher speed than roller 4a1) as the print media passes through the print zone, where the drive device is arranged to drive at least one of the roller members 4b1 with different drive parameters (i.e., slightly slower speed equal to speed of roller 4a1) as an edge of the print media passes through the print zone. See, in particular, the partial English language translation attached to this Office Action.

With respect to claims 2-4, note Osumi et al. teach changing the rotation speed of the discharge roller 4b1, as described in paragraphs [0022] and [0023] of the partial English language translation in particular. Note that changing the speed of the discharge roller also inherently affects other drive parameters such as amount of rotation of the roller and tractional force.

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With respect to claims 5, 16, and 19, to the extent the term “gradually” has any clear meaning, note Osumi et al. teach changing the drive parameters (i.e., speed of the discharge roller) “gradually” at least to some extent.

With respect to claim 6, note Osumi et al. teach a detector 8 for detecting the trailing edge of the print media and causing the drive device to change at least the second drive parameters in paragraphs [0019]-[0023].

With respect to claim 15, Osumi et al. teach an arrangement for driving a print media through a hardcopy apparatus including all of the structure as recited, wherein the drive device drives the first and second roller members at a predetermined transmission ration as the print media passes through the print zone and the transmission ration is varied as an edge of the print media passes through the print zone. Note the above comments with respect to claim 1.

With respect to claim 17, note Osumi et al. teach a hardcopy device including a printhead 6c and means for moving the print media past the printhead as recited. Again, note the above comments with respect to claim 1.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over either of Sakakibara et al. or Osumi et al. further in view of Kanemitsu (US 5,131,770). Each of Sakakibara et al. and Osumi et al. teach an arrangement for driving a print media through a hardcopy apparatus as recited, with the exception of the second roller member including a position encoder device for controlling the drive device.

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Kanemitsu teaches the use of a rotary encoder device with a roller member in a sheet feed mechanism is well known in the art. In view of teaching, it would have been obvious to one of ordinary skill in the art to provide the second roller member of either of Sakakibara et al. or Osumi et al. with a rotary encoder device as taught by Kanemitsu to allow for accurate calculating of the amount of feed of the sheet member based upon the rotational amount of the second roller member and better control of the printing operations.

With respect to claims 8 and 9, note Kanemitsu teaches an encoder device 14 having a plurality of slits 14a and a photo-interrupter 15 which would provide a “substantially” continuous signal during rotation of the roller member (Figures 1 and 5) and also teaches an encoder device having only a single slit which would provide an intermittent signal during rotation of the roller member (Figure 8).

Allowable Subject Matter

11. Claims 10-14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 10, the prior art of record fails to teach or fairly suggest an arrangement including all of the structure as recited, in

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combination with and particularly including, providing a look-up table to covert the amount of rotation of the encoder device into appropriate control of the drive device to produce a desired length of arcuate advance of a part of the surface of the second roller.

With respect to claims 11-12, the prior art of record fails to teach or fairly suggest an arrangement including all of the structure as recited, in combination with and particularly including, providing a first encoder device for the first roller member and a second encoder device for the second roller member.

With respect to claim 13, the prior art of record fails to teach or fairly suggest a method of printing including all of the method steps and/or structure as recited, in combination with and particularly including, providing a first print media advance movement with the drive mechanism for the first roller, determining the setting of the position encoder device, and then using the position encoder device associated with the second roller member to provide subsequent media advance movements.

With respect to claim 14, the prior art of record fails to teach or fairly suggest an arrangement including all of the structure as recited, in combination with and particularly including, a detector for detecting the leading edge of the print media as it leaves the print zone and the detector causing the drive device to change the first drive parameters of the first roller member.

Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawaguchi et al. (US 6,761,425) and Tanaka et al. (US 6,095,703) each teach a printing arrangement having obvious similarities to the claimed subject matter.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leslie J. Evanisko
Primary Examiner
Art Unit 2854

lje
March 18, 2005